

## **Non-Interference Compliance**

Regarding Facility id 150843

Channel 277

### **Description of Exhibit 13 Contents**

This exhibit demonstrates that the proposed facility complies with contour overlap and interference protection provisions in all of the applicable rule sections and that this application for a construction permit is in full compliance with 47 C.F.R. § 74.1204.

**Let it be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 C.F.R. § 74.1203.**

Page 2 of this exhibit is an explanation of the method used to demonstrate compliance with contour overlap and interference provisions based on 47 C.F.R. § 74.1204(d), which states:

*[A]n application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable.*

Page 3 of this exhibit contains the tabulated data from the interference analysis, which shows all stations whose protected contours come within 50 km of the 34 dBμ F(50,10) contour of the proposed translator. These tabulated values were calculated using data from the FCC's CDBS files and 30 arc second terrain data. The column labeled "Adj" shows the number of channels difference between the entry and the proposed translator. The column labeled "Dist" shows the distance in km. The column labeled "Overlap" shows the area of contour overlap in square kilometers.

Page 4 of this exhibit is a portion of a USGS 1:24,000 scale 7.5 minute quadrangle at full scale with the calculated area of interference overlaid. The sheet includes the quadrangle name and measurement scale at the bottom-left corner (note: "Mt" refers to meters). The area of interference was calculated using the free space equation and 120 radials.

Page 5 of this exhibit is an aerial photo of the vicinity surrounding the proposed translator's tower site.

**Note: There are no buildings or major roads within the zone of predicted interference, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.**

### Compliance with 47 C.F.R. § 74.1204(d)

All authorized second and third adjacent stations with which the proposed translator has contour overlap are tabulated below. Column four show the station's signal level at the proposed translator's tower site, and column five gives the minimum value within the entire standard interfering contour of the proposed translator (100 dBμ for most classes, 94 for class B, 97 for class B1). The minimum second or third adjacent F(50,50) contour within the proposed translator's standard interfering contour was used to calculate the proposed translator's actual "worst-case" interfering contour.

<b>Application_id</b>	<b>File Number</b>	<b>Callsign</b>	<b>Contour at Tower</b>	<b>Min. Contour</b>
1358710	BMLH20100308ACD	KABZ	75	75
155270	BLH19901205KB	KARN-FM	82.7	81.6
Minimum F(50,50) Contour of Adjacent Station within Proposed Translator's Standard Interfering Contour				<b>75</b>

FCC 02-244 at Section II.A.5 states that "when demonstrating that 'no actual interference will occur due to . . . other factors,' pursuant to Section 74.1204(d), an applicant may use the undesired-to-desired signal ratio method." The undesired-to-desired ratio for second and third adjacent stations required by § 74.1204(a) is 40 dB. Since the minimum protected contour strength within the proposed translator's standard interference contour is **75 dBμ**, this makes the proposed translator's worst-case interfering contour **115 dBμ**. By the free-space equation, this contour is calculated to extend a maximum of **197.2 m** from the transmit antenna.

The interfering contour of the proposed translator was calculated for 120 radials and plotted on the pertinent portion of a USGS quadrangle (page 4 of this exhibit). As demonstrated on the quadrangle, there are no populated structures or highways within the area of interference (Note: FCC 02-244 at Section II.A.6 states that USGS quadrangles "have been recognized as acceptable to demonstrate lack of population").

**Note: There are no buildings or major roads within the zone of predicted interference, so a lack of population has been demonstrated within the area of interference and this application is therefore in full compliance with 47 C.F.R. § 74.1204.**

**Antenna Manufacturer:** SCA  
**Antenna Model:** FMV-1  
**CORAGL:** 10 m  
**Maximum ERP:** 0.25 kW  
**Interfering Contour:** 115 dBμ  
**Max Int. Contour Distance:** 197.2 m

# **Adjacent Channel Study** **For Station K224CT, Facility\_id: 150843**

## **Co-channel through third adjacent:**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Overlap
155270	24151	BLH	19901205KB	KARN-FM	RADIO LICENSE HOLDING CBC, LLC	C2	SHERIDAN	AR	LIC	50	251	275	2	17	1.4918
288611	94293	Null	Null	Null		C2	SHERIDAN	AR	USE	0	0	275	2	23	1.4918
295160	60134	Null	Null	KABZ	SIGNAL MEDIA OF ARKANSAS, INC	C	LITTLE ROCK	AR	USE	0	0	279	2	47.3	1.4918
1358710	60134	BMLH	20100308ACD	KABZ	SIGNAL MEDIA OF ARKANSAS, INC	C	LITTLE ROCK	AR	LIC	100	583	279	2	47.3	1.4918
1480715	138338	BLFT	20111223AAU	K274BX	ARKANSAS COUNTY BROADCASTERS, INC.	D	STUTTGART	AR	LIC	0.25	122	274	3	76.3	0
189938	48946	BLH	19930915KC	KIXB	NOALMARK BROADCASTING CORPORATION	C1	EL DORADO	AR	LIC	100	243	277	0	138.5	0
295056	46336	Null	Null	KWOZ	WRD ENTERTAINMENT, INC.	C	MOUNTAIN VIEW	AR	USE	0	0	277	0	160.4	0

## **Intermediate Frequencies (53 and 54 channels difference):**

Application_id	Facility_id	Prefix	ARN	Call	Licensee	Class	City	State	Status	ERP	RCAMSL	Channel	Adj	Dist	Clr
578175	0	RM	10268	Null		A	BEARDEN	AR	VAC	0	0	224	53	76.5	66.5
1074196	14465	BLH	20050721ABN	KASR	CREATIVE MEDIA INCORPORATED	C3	VILONIA	AR	LIC	25	206.7	224	53	80.1	68.1
998097	14465	Null	Null	KASR	CREATIVE MEDIA INCORPORATED	C3	VILONIA	AR	USE	0	0	224	53	82.5	70.5
1419444	150849	BLFT	20110315ABI	K223BM	PINES BROADCASTING, INC	D	WARREN	AR	LIC	0.25	123	223	54	88.2	78.2





